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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/522,296	03/09/00	KUSUMOTO	H 8203-341

QM12/1011  
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EXAMINER	
PASSANITI, S	
ART UNIT	PAPER NUMBER
3711	6

DATE MAILED: 10/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>09/522,296</b>	Applicant(s) <b>KUSUMOTO</b>
	Examiner <b>SEBASTIANO PASSANITI</b>	Art Unit <b>3711</b>
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
<b>Period for Reply</b>		
<p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>THREE</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
<b>Status</b>		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>(see detailed Office action)</u>		
2a) <input type="checkbox"/> This action is <u>FINAL</u> .      2b) <input checked="" type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <u>Ex parte Quayle</u> 1035 C.D. 11; 453 O.G. 213.		
<b>Disposition of Claims</b>		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-29</u> is/are pending in the application		
4a) Of the above, claim(s) <u>22-27</u> is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input checked="" type="checkbox"/> Claim(s) <u>1-21, 28, and 29</u> is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.		
<b>Application Papers</b>		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
<b>Priority under 35 U.S.C. § 119</b>		
13) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).		
a) <input checked="" type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of:		
1. <input checked="" type="checkbox"/> Certified copies of the priority documents have been received.		
2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.		
3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
*See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).		
<b>Attachment(s)</b>		
15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)		
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>2</u>		
18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____		
19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
20) <input type="checkbox"/> Other: _____		

*S. Passaniti*  
Sebastiano Passaniti  
Primary Examiner

This Office action is responsive to communication received 08/06/2001 - Priority Documents and Election.

Claims 1-29 remain pending.

Claims 22-27 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant's election **without** traverse in Paper No. 5 is acknowledged.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 7, 8, 9, 10, 11, 12, 14, 15, 18, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Mockridge (GB 2,230,459).

As to claims 1 and 28, note page 1, lines 12-26, wherein Mockridge discloses a hollow outer shell that may be cast integrally with a shaft securing portion. The club head includes a top (14), a sole (18), and heel and toe portions (Figure 2). In addition, said shaft securing portion is noted as socket (19) and extends between the top and sole portions (Figure 1).

As to claim 6, a shaft securing hole or bore (20) penetrates the socket (19) from the top to the sole.

As to claim 7, the shaft securing hole includes a bottom (Figure 1).

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As to claim 8, the bottom of the shaft securing hole and the sole lie in the same plane.

As to claim 9, the bottom portion of the shaft securing hole and the sole have substantially the same thickness.

As to claim 10, see page 1, lines 20-22, wherein Mockridge notes that the socket (19) may be cast integrally with the head.

As to claim 11, the shaft securing portion (bore (20)) is clearly dimensioned to accept a cylindrical lower shaft portion (21).

As to claim 12, Figure 2 shows that at least a clearance of from 1 mm to 10 mm exists between the heel portion and the shaft securing element (19), particularly closer to the sole; thus, forming a hollow portion.

As to claim 14, Figure 2 shows that the hollow portion is wider in width nearer the sole than at the top.

As to claim 15, as the sole and heel are distinct portions of the head, it is clear that an edge is formed between the sole and the heel wall.

As to claim 18, Figures 1 and 2 clearly show a hosel portion formed at the top by projecting the shaft securing portion from the top portion.

As to claim 29, the top portion of the club head body is provided with an aperture (joining hole) to accommodate the shaft receiving element (19).

Claims 1, 2, 3, 5, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al ('097).

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As to claim 1, see Figure 6, wherein Endo shows a club head having a top (54), sole (56), toe portion (58) and heel portion (57). A shaft securing portion (62) extends from the top to the sole. Endo discloses a hollow metal shell (col. 4, lines 1-13). Figure 6 shows a first hollow portion between the shaft securing portion (62) and the heel portion (57)

As to claim 2, see Figure 7 and col. 4, lines 31-40, wherein Endo details that the face portion (53) is fixed to the main body (52).

As to claim 3, the hidden lines depicting the extension of shaft securing portion (62) indicate that the shaft securing portion is also spaced from the front striking face (53); thus, forming a hollow portion between the shaft securing portion and the face portion.

As to claim 5, see col. 3, lines 1-10, wherein Endo clearly discloses press working.

As to claim 16, Figure 6 indicates that the inside portion of the toe is higher than the inside portion of the heel in a cross-section passing through the axis of the shaft securing hole and along the face portion.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 13, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mockridge (GB 2,230,459) in view of Minabe. Mockridge differs from the claimed invention in that Mockridge does not disclose any of 1) the claimed wall thickness that is required by

claim 13, 2) a support portion as outlined in claim 17, and 3) the particular materials defined in claims 20 and 21. Minabe teaches a wall thickness of 1.2 mm (col. 3, lines 29-31) to reduce the weight of the head. Minabe further outlines that a pipe-guiding groove (34), which is deemed to serve as a support portion, attaches the shaft securing portion (24c) to the heel portion. Still further, Minabe makes reference to  $\beta$ -type materials for both the face and the head, although notes that other titanium alloys may be used (col. 3, lines 25-38). These materials provide the required rigidity for the club head. In view of the patent to Minabe, it would have been obvious to modify the Mockridge device to include these claimed features, the motivation being to make the club head both lighter in weight and rigid and to more securely retain the shaft securing shaft portion.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mockridge (GB 2,230,459) in view of Motomiya. Mockridge differs from the claimed invention in that Mockridge uses a casting method to form the club head. Motomiya acknowledges that club heads formed by the lost wax process, e.g., cast club heads, often suffer from pinholes and cracks (col. 1, lines 16-21), noting that forged pieces substantially eliminate said pinholes and cracks (col. 1, lines 36-40). Further, Motomiya shows the commonness of fashioning the head from plural forged elements, with the face making up a distinct part and mated to the remainder of the shell to form a hollow structure (col. 3, lines 3-6 and Figure 3). The incorporation of press forging to generate separate club head parts is deemed to be advantageous by Motomiya from a manufacturing point of view (col. 4, lines 19-25). In view of the patent to Motomiya, it would

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have been obvious to modify the device in the cited art reference to Mockridge by substituting a forging process for the casting procedure disclosed by Mockridge, the motivation being to produce a high quality club head that is substantially free of defects such as cracks and pinholes. Further and in view of the teachings in Motomiya, it would have been obvious to provide a separate face united to a club head body as opposed to fashioning a unitary cast body, the motivation being to make it desirable to mass produce the club heads, i.e., make the club heads use a less expensive process.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mockridge (GB 2,230,459) in view of Mills. To have modified the Mockridge device such that the shaft securing portion does not protrude above the top portion to provide an even, finished appearance would have been obvious in view of the patent to Mills which shows it to be old in the art to provide a shaft securing element (Figures 4, 5) that remains confined within the head. Note that Mills details that the club head construction he details is not limited to clubs formed exclusively formed of wood material.

Claims 15, 19, and 28 are objected to because of the following informalities:

As to claim 15, line 2, the period (.) is unnecessary. In line 3, “near than at least” is grammatically incoherent.

As to claim 19, line 1, “Golf” should read --golf-- .

As to claim 28, line 4, should “cast” read --casting-- .

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scott (GB 2,225,725) shows a shaft retaining portion. Kobayashi shows a press forming operation. Nishimura, Helmstetter, Drajan, and Take show shaft receiving elements of interest. Zeider shows plural cast parts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is (703)308-1006.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeanette Chapman, can be reached on (703) 308-1310. The formal fax phone number for the organization where this application or proceeding is assigned is (703) 305-3579. The informal fax phone number is (703) 308-7768. Applicant is strongly urged to contact or leave voice mail notification with the examiner just prior to sending an informal facsimile transmission.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Applicant may find it useful to refer to the Official Web site for the United States Patent & Trademark Office at [www.uspto.gov](http://www.uspto.gov) for information regarding a variety of patent and trademark related topics.

Sebastiano Passaniti/ sp  
October 5, 2001

  
**SEBASTIANO PASSANITI**  
**PRIMARY EXAMINER**  
**ART UNIT 3711**